

SOME NEW NORTH AMERICAN PHORIDÆ.

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The new species described below are several recently sent to me for identification, and as all are forms which will be easily recognized on account of their striking characters, I am describing them at the present time.

***Phora variabilis*, new species.**

Female. Length 3.7-4 mm. Black, the antennæ, palpi and legs yellowish brown, and the fourth to sixth abdominal segments reddish orange. Head shining black, front scarcely broader than high; lowest reclinate bristles four in number, very closely placed at the prominent median lobe of the anterior margin of the front; second row slightly curved, the median ones farther from each other than from the lateral ones; third row straight, equidistant; occipital row as usual. Antennæ small, oval, brown or fulvous, the dorsal arista without trace of pubescence. Palpi moderately stout, brownish yellow and strongly bristly; proboscis short, retracted. Cheeks with one large and two smaller macrochætæ. Postocular cilia stout but not enlarged below. Dorsum of thorax subshining, black, pubescent, rather elongate in shape as is also the scutellum; one pair of dorsocentral macrochætæ and four equally strong scutellar bristles. Abdomen with the second and sixth segments elongated, the first and second except for pale capillary margins black; third broadly orange-red apically; fourth to sixth orange-red as is also the venter. Apical half of abdomen strongly hairy, especially below. Legs brownish yellow; anterior tibiæ with a single bristle at the middle; middle ones with a dorsal pair at the basal third and another dorsal one at the apical third; posterior pair with a dorsal pair in the type (or a group of three in one specimen) at the basal third, and an external apical one in addition to two rather slender spurs. Wings hyaline, veins brownish yellow; costal vein reaching slightly beyond the middle, not at all swollen, with very fine and closely placed cilia; second vein ending midway between the humeral cross-vein and the tip of the third; third vein bristly, or rather hairy, as far as the origin of the second, its furcation very acute, the second and third lying very close together; fourth sharply curved at the base, straight beyond and parallel with the fifth, ending just before the wing tip; fifth, sixth and seventh but slightly curved. Knob of halteres blackish; pedicel pale.

Two specimens: type, Pullman, Wash., July 7, 1908 (A. L. Melander); cotype, Florissant, Colo., June 28, 1908 (S. A. Rohwer).

This species is closely similar to several European ones. It comes nearest perhaps to *P. curvinervis* Becker, originally described from Europe, but which also occurs in Washington state. However, the second abdominal segment is lengthened and the chætotaxy of the hind

tibiæ different, as well as the color of the abdomen. From *P. abdominalis* Fall., which it resembles in color, it can be distinguished by the bristly third vein, and from *P. thoracica* Meig. by its dark halteres, non-thickened costal vein and orange-red abdomen. The difference in the chætotaxy of the hind tibiæ in the two specimens before me is puzzling, but careful scrutiny reveals no other distinguishing differences of importance and I am convinced that both belong to a single species.

***Phora occidentalis*, new species.**

Female. Length 2.4–2.6 mm. Black, the anterior trochanters and knees honey-yellow. Wings infuscated, especially anteriorly and along the veins. Head rather small, the front very slightly broader than high, polished and impunctured. Lower pair of reclinate setæ small, widely separated; second row of four scarcely above the lower pair, equidistant and forming a nearly straight line; third row straight; occipital row as usual. Antennæ small, rounded, the arista strongly pubescent. Palpi slender, bristly only toward the tips. Proboscis short, membranous. Cheeks each with several macrochætæ. Mesonotum elongate, shining, sparsely hairy, with one pair of dorsocentral macrochætæ. Scutellum with four marginal bristles, the lateral pair however considerably weaker than the median. Abdomen as usual, the second segment not elongated. Surface of abdomen sparsely hairy. Legs short but slender; anterior tibiæ without bristles; middle ones with a pair of delicate bristles at the basal third, hind pair with a single weak bristle just before the middle. Wings infuscated, especially on the anterior half and along the course of the veins, narrow in outline. Costal vein reaching well beyond the middle of the wing, with short, sparse, and delicate cilia, quite distinctly thickened on its apical half. First vein ending three fourths as far from the tip of the third as from the humeral cross-vein; second ending midway between the third and first, originating very far basally, nearer the origin of the fifth than of the fourth vein, and just opposite to the tip of the first; third vein bristly as far as the furcation which is about at its middle; fourth vein rather sharply curved at its extreme base, straight elsewhere, and ending well before the wing tip; fifth nearly straight; sixth sinuate; seventh very distinct at the base, but not attaining the wing margin. Halteres black.

Two specimens, both sent me by Professor A. L. Melander, one from Moscow Mt., Idaho, June 17, 1904, and the other from Pullman, Wash., May 5, 1907.

This is a very peculiar species owing to the great length of the fork of the third vein. This peculiarity will at once serve to distinguish it from any other described species that I have seen.

***Plastophora* Brues.**

Brues, Ann. Mus. Nat. Hung., III, p. 551 (1905).

Coquillett, Canadian Entomologist, XXXIX, p. 208 (1907) (*Pseudacteon*).

Brues, Entomological News, XVIII, p. 430 (1907).

Plastophora juli, new species.

Female. Length, including the extruded ovipositor, 2 mm. Brownish yellow, the ocellar tubercle, tips of posterior femora and abdomen, except narrow margins of segments 2-5, black. Head normal, front wider than high, the ocellar tubercle and median groove well developed, four proclinate setæ, the lower pair considerably smaller; lowest reclinate row of four setæ, forming with the upper proclinate pair a slightly curved equidistant series; middle row equidistant, nearly straight; ocellar row very large and strong. Cheeks each with two stout macrochaetæ below and a weaker pair both anteriorly and posteriorly. Palpi large, of normal shape, with moderate bristles. Antennæ oval, the arista distinctly dorsal, thinly pubescent. Mesonotum elongate and narrower than usual; scutellum more than one half as long as broad; one pair of dorsocentral macrochaetæ and four scutellar bristles. Abdomen to the tip of the sixth segment of the usual form, the seventh long, tubular, encasing the base of the extruded ovipositor; the latter compressed, knife-shaped, and slightly arcuated downward toward the tip which is obliquely truncate. Second to fifth segments gradually decreasing in length, sixth, seventh and ovipositor longer, subequal, each slightly longer than the second. Second segment with a lateral bunch of bristly hairs. Legs rather slender, setæ on middle and hind tibiæ weak and short although distinct. Wings yellowish hyaline, veins pale brown; costal vein reaching very slightly beyond the middle of the wing, its bristles of moderate length and closely placed. Tip of first vein slightly, but distinctly nearer the tip of the third than the humeral cross-vein; fork of third vein obtuse, the second vein nearly perpendicular to the costa and enclosing a large cell; four light veins; fourth vein evenly but slightly curved; fifth, sixth, and seventh but little curved, the fifth as far from the wing tip as the fourth. Halteres pale yellow.

Described from two specimens collected by Dr. S. Graenicher at Milwaukee, Wis., during July, 1908, and very generously given to me for study. He found them attacking a small myriapod (*Julus* sp.) upon which they were attempting to oviposit. From this the species is undoubtedly a parasite of these myriapods, although an attempt to breed a second generation of the flies failed, probably on account of the premature death of the *Julus* in captivity.

This is the second species of the genus to be discovered in North America. It differs from *P. crawfordii* Coq. (1907) by its oval antennæ and differently shaped ovipositor as well as in minor details. The latter is an ant parasite attacking the well-known fire-ant (*Solenopsis geminata*) in Texas.